

FBI Latent Print Units Procedures for Management of Equipment, Chemicals, Supplies, and Services

1 Purpose

These procedures establish calibration, performance check, and maintenance requirements to ensure the proper functioning of equipment, to include software, used in the Latent Print Units. The procedures also address the receipt and storage of chemicals and supplies and how suppliers of products and services are evaluated.

2 Scope

These procedures apply to personnel who use and/or maintain equipment, chemicals, supplies, and services that have an effect on the validity of latent print forensic examinations.

3 Latent Print Units Equipment, Chemicals, Supplies and Services

The Latent Print Unit Chiefs will ensure that all activities associated with the Latent Print Units equipment, chemicals, supplies and services in their respective units are conducted according to the practices stated in the FBI Laboratory Quality Assurance Manual and the FBI Laboratory Operations Manual in addition to the procedures described in this document and that the proper records are retained.

3.1 Software

Software used by the Latent Print Units that meets the requirements listed below will be considered equipment and will abide by the same requirements.

- Software that may significantly and adversely affect the integrity of friction ridge print images or supporting data (e.g., digital history),
- Software that produces reportable statistical conclusions based on latent print information, or
- Software that is validated by the Latent Print Units.

Software in general use that does not fall under the conditions listed above is not considered equipment and does not fall under Laboratory or discipline requirements.

4 Equipment Calibration, Performance Check, and Maintenance Procedures

4.1 Calibration

None of the equipment used in the Latent Print Units requires calibration. While equipment needs to operate within the parameters appropriate to the type and purpose, calibration does not have a significant effect on the quality of the examinations conducted.

4.2 Performance Checks and Maintenance Procedures

All Latent Print Units equipment will function within reasonable standards according to manufacturer's specifications. All maintenance can be performed by internal personnel or by an outside vendor, as appropriate. Any Latent Print Units equipment found to be not functioning properly will be removed from service and a notification will be placed on the item. A successful performance check is required before the equipment can be placed back into service.

All equipment used for latent print processing examinations at a non-FBI laboratory controlled space must be performance checked prior to or at the time of use. A successful performance check for any non-light source equipment must be recorded in the case records at least once in each 24-hour period of use.

4.2.1 Cyanoacrylate Fuming Chambers

Each Latent Print Units mechanized cyanoacrylate fuming chamber (superglue chamber) will be serviced as needed and appropriate records will be retained.

4.2.2 Microscopes and Macroscopes

Each Latent Print Units microscope/macroscope used to examine evidence will be serviced as needed and appropriate records will be retained.

4.2.3 Humidity Chambers and Ovens

The humidity chambers and ovens are serviced annually to ensure that they are functioning within the appropriate parameters. A record of the service will be retained.

4.2.4 Forensic Light Sources

Each Forensic Light Source is checked prior to being placed in service, either initially or after repair. A record of the check will be retained. Thereafter, Forensic Light Sources are inherently checked for performance with every use. If any forensic light source fails to operate, the equipment is taken out of service until it is repaired.

4.2.5 Digital Imaging Equipment

4.2.5.1 Performance and Maintenance

Each Latent Print Units owned digital capture device or hardcopy export device (e.g., camera, scanner, printer) will be serviced according to maintenance agreements and/or as needed. The record of service is retained. Equipment owned by external bodies will be serviced by them according their requirements.

4.2.5.2 Security and Access

The Technology Development Program Manager will ensure that access to the Latent Print Digital Imaging System is controlled. Sign-on at any workstation requires a unique user name and password. Access to all files within Digital Workplace is tracked within the program. Access to the Forensic Information Scanning Hub is controlled by the Information Technology group at the Huntsville location. Access can be coordinated through the Huntsville Laboratory Manager. Sign-on at any workstation requires a unique user name and password. Access to the Next Generation Identification System is controlled by the Criminal Justice Information Services Division.

4.2.5.3 Data Back-Up

The Latent Print Digital Imaging System server is a Redundant Array of Independent Discs providing built-in redundancy in the system. A real-time replication of the database provides protection from database failures to significantly reduce data loss and provide little or no downtime due to database issues. Additionally, a redundant database backup is configured to run on a daily basis. A check of the backup is conducted at least weekly and logged.

The Forensic Information Scanning Hub system uses mirror servers for information protection. A redundant database backup is configured to run during real time. The system is maintained by the Huntsville Information Technology group.

The Next Generation Identification System backup is controlled by the Criminal Justice Information Services Division.

4.3 Performance Checks and Maintenance Records

The Latent Print Operations Unit Chief and the Scientific and Biometrics Analysis Unit Chief will ensure all records for Latent Print Units' laboratory equipment performance checks and maintenance are retained for their respective locations. The Latent Print Support Unit Chief will ensure the routine performance checks and maintenance records for digital imaging equipment are retained.

5 Procedures for Procurement, Reception, and Storage of Chemicals

5.1 Procurement of Chemicals

A Laboratory Manager will ensure all purchase requests for all Latent Print Units chemicals are prepared according to FBI and/or Laboratory Division procurement regulations in addition to the appropriate sections of the FBI Laboratory Quality Assurance Manual.

5.2 Record of Receipt

The receipt of all purchased Latent Print Units chemicals will be recorded by the Latent Print Units personnel receiving the order. The following steps will occur:

- Chemicals are received in the Laboratory.
- Inventory is conducted to ensure all ordered chemicals were received and comply with any specifications defined in the associated technical procedure(s).
- If required, chemicals receive a barcode from appropriate Safety Manager/Specialist(s).

5.3 Storage of Chemicals

All chemicals in Latent Print Units will be stored in the appropriate storage locations. Storage conditions, as defined by the manufacturer of the chemical, will be met.

5.3.1 Commercial Latent Print Units Chemicals

5.3.1.1 Barcoded Quantico Chemicals

- All chemicals barcoded by the Safety Manager/Specialist(s) are either taken directly to Latent Print Units Laboratory space or stored in room 1354 or room 1351 until needed in Latent Print Units.
- When Latent Print Operations Unit personnel remove chemicals from Room 1354 or room 1351, a Chemical Transfer Log is completed. This log notifies Safety Manager/Specialist(s) of the new storage area for the chemical(s).
- After a chemical container is empty, Latent Print Operations Unit personnel provide the barcode(s) information from the container to Safety Manager/Specialist(s).

5.3.1.2 Barcoded Huntsville Chemicals

- Scientific and Biometric Analysis Unit personnel provide the Safety Manager/Specialist(s) with an inventory of received chemicals.
- The Safety Manager/Specialist(s) provide barcodes for the chemical containers.
- After a chemical container is empty, the Scientific and Biometric Analysis

Unit personnel provide the barcode(s) information from the container to the Safety Manager/Specialist(s).

5.4 Latent Print Units Chemical Solutions

All chemical solutions retained within the Latent Print Units will be stored according to the applicable document(s) within the FBI Latent Print Units Processing Manual and the FBI Laboratory Safety Manual. Reagents or other chemicals requiring a performance check are tested per the applicable document(s) within the FBI Latent Print Units Processing Manual. Records of the performance checks are maintained in Latent Print Units and/or in the case records, as appropriate.

5.5 Disposal

Latent Print Units chemicals, including their containers, are disposed of according to the FBI Laboratory Safety Manual.

6 Evaluation of Latent Print Units Products and Services Suppliers

All suppliers of products and services that affect Latent Print Units laboratory activities will be evaluated at least the first time the supplier is used and a record of these evaluations will be retained. The Latent Print Unit Chiefs will ensure a list of Latent Print Units approved suppliers of products and services will be maintained for their respective units. Suppliers may be re-evaluated as needed.

7 References

FBI Laboratory Quality Assurance Manual. Federal Bureau of Investigation, Laboratory Division. Latest Revision.

FBI Laboratory Safety Manual. Federal Bureau of Investigation, Laboratory Division. Latest Revision.

Federal Acquisition Regulation, Latest Revision.

FBI Latent Print Units Processing Manual. Various Standard Operating Procedures for Processes Used to Develop Latent Prints. Federal Bureau of Investigation, Laboratory Division. Latest Revision.

Rev. #	Issue Date	History
1	10/02/17	<p>Minor grammar, punctuation, and minor wording changes throughout. “Unit” changed to “Units” in unit name throughout document and Appendix. “Industrial Hygiene Safety Managers” changed to be generic and include specialists throughout. Huntsville Quality Assurance Program Manager added through document to Forensic Analysis Support Unit requirements. Directed responsibilities modified from absolute to “ensure” throughout document. Section 2, changed to discipline versus unit and removed type of unit personnel Section 3 through Section 3.3, removed. Section 3 added. Section 4 title added. Calibration statement added to Section 4.1. Section 4.1.1, and Section 4.1.2, removed. Section 4.2, first paragraph, allowed work to be done by internal personnel and second paragraph clarified. Section 4.2.1 and Section 4.2.2, modify check requirements. Section 4.2.3.1, modified wording tied to report and retention of report. Section 4.2.3.2 and Section 4.2.3.3, added Forensic Information Scanning Hub and Huntsville responsibility. Section 4.2.4, removed specific references to other rooms, added ovens, and changed requirement to an annual check. Section 4.2.5, removed and remaining renumbered. New Section 4.2.5, added first two sentences and first word of next to last sentence. Section 4.3, gave responsibility to Unit Chiefs to ensure done. Section 5.1, removed specific section number and designee. Section 5.2, removed LPU personnel requirement. Section 5.3, modified title and moved bullet three from Section 5.3.1.1 underneath. Section 5.3.1.1 modified for Quantico specific. Section 5.3.1.2, changed to cover Huntsville barcoded chemicals. Section 5.5, “if necessary” removed as well as reference to Processing Manual. Section 6, modified retention requirements. Removed two references in Section 7. References updated. Abbreviations addressed.</p>
2	08/21/19	<p>Minor wording changes throughout document. Scope expanded and external bodies added throughout document. Section 1, software added. Section 3.1 added. Section 4.2, “processing” added. Section 4.2.3 through Section 4.2.3.2 changed to Section 4.2.5 through Section 4.2.5.3 and Section 4.2.4 and Section 4.2.5 renumbered accordingly. Section 5.2, bullet two, added compliance requirement. Section 5.3.1.2, replace Laboratory Manager with general unit personnel. Section 6, updated to apply to all products and services. Appendix A, form removed.</p>

Approval

Redacted - Signatures on File

Latent Print
Technical Leader

Date: 08/02/2019

Latent Print Operations
Unit Chief

Date: 08/02/2019

Latent Print Support
Unit Chief

Date: 08/02/2019

Scientific and Biometrics
Analysis Unit Chief

Date: 08/02/2019

QA Approval

Quality Manager

Date: 08/02/2019